

IN THE CLAIMS:

Please cancel claims 8 and 9.

Please add claims 23-46 as follows:

*Sub C1*  
~~23.~~ A method for detecting prostate cancer in a patient comprising:

- (a) obtaining a biological sample from the patient;
- (b) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising a sequence selected from the group consisting of SEQ ID NO: 110 and complements of SEQ ID NO: 110; and
- (c) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers thereby detecting prostate cancer, wherein the biological sample is selected from the group consisting of: blood and serum.

*Sub D2*  
*B'* ~~24.~~ The method of claim 23, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 110.

*Sub C2*  
~~25.~~ A method for detecting prostate cancer in a patient comprising:

- (a) obtaining a biological sample from the patient;
- (b) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising a sequence selected from the group consisting of SEQ ID NO: 111 and complements of SEQ ID NO: 111; and
- (c) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers thereby detecting prostate cancer, wherein the biological sample is selected from the group consisting of: blood and serum.

*Sub D4*  
~~26.~~ The method of claim 25, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 111.

27. A method for detecting prostate cancer in a patient comprising:

(a) obtaining a biological sample from the patient;

(b) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising a sequence selected from the group consisting of SEQ ID NO: 115 and complements of SEQ ID NO: 115; and

(c) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers thereby detecting prostate cancer, wherein the biological sample is selected from the group consisting of: blood and serum.

28. The method of claim 27, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 115.

29. A method for detecting prostate cancer in a patient comprising:

(a) obtaining a biological sample from the patient;

(b) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising a sequence selected from the group consisting of SEQ ID NO: 173-175, 177 and complements of SEQ ID NO: 173-175 and 177; and

(c) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers thereby detecting prostate cancer, wherein the biological sample is selected from the group consisting of: blood and serum.

30. The method of claim 29, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 173-175 and 177.

31. A method for detecting prostate cancer in a patient comprising:

(a) obtaining a biological sample from the patient;

(b) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA

Sub C4  
molecule comprising a sequence selected from the group consisting of SEQ ID NO: 223 and complements of SEQ ID NO: 223; and

(c) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers thereby detecting prostate cancer, wherein the biological sample is selected from the group consisting of: blood and serum.

Sub D3  
32. The method of claim 31, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 223.

Sub C5  
33. A method for detecting prostate cancer in a patient comprising:  
(a) obtaining a biological sample from the patient;  
(b) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising a sequence selected from the group consisting of SEQ ID NO: 224 and complements of SEQ ID NO: 224; and  
(c) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers thereby detecting prostate cancer, wherein the biological sample is selected from the group consisting of: blood and serum.

Sub D1  
34. The method of claim 33, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 224.

Sub D10  
35. A method for detecting the presence of a DNA molecule comprising SEQ ID NO: 110 in a biological sample, the method comprising:

(a) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising SEQ ID NO: 110; and

(b) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers.

36. The method of claim 35, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 110.

37. A method for detecting the presence of a DNA molecule comprising SEQ ID NO: 111 in a biological sample, the method comprising:

(a) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising SEQ ID NO: 111; and

(b) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers.

38. The method of claim 37, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 111.

39. A method for detecting the presence of a DNA molecule comprising SEQ ID NO: 115 in a biological sample, the method comprising:

(a) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising SEQ ID NO: 115; and

(b) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers.

40. The method of claim 39, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 115.

41. A method for detecting the presence of a DNA molecule comprising SEQ ID NO: 115 in a biological sample, the method comprising:

(a) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising SEQ ID NO: 173-175 and 177; and

(b) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers.

42. The method of claim 39, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 173-175 and 177.

43. A method for detecting the presence of a DNA molecule comprising SEQ ID NO: 223 in a biological sample, the method comprising:

(a) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising SEQ ID NO: 223; and

(b) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers.

44. The method of claim 43, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 223.

45. A method for detecting the presence of a DNA molecule comprising SEQ ID NO: 115 in a biological sample, the method comprising:

(a) contacting the sample with at least two oligonucleotide primers in a polymerase chain reaction, wherein at least one of the oligonucleotides is specific for a DNA molecule comprising SEQ ID NO: 224; and

(b) detecting in the sample a DNA sequence that amplifies in the presence of the oligonucleotide primers.

46. The method of claim 45, wherein at least one of the oligonucleotide primers comprises at least about 10 contiguous nucleotides of a DNA molecule comprising SEQ ID NO: 224.